App. A:
Bolcome Decl., Ex. 8.l

Ilion, New York
August 25, 1948

PROGRESS REPORT

MODEL 721-722 FIRE CONTROL AND SAFETY

INTRODUCTION

Three field complaints have been received which reported the M/721 bolt action Rifle firing when the Safety is moved to the "off" position. Two guns representing two of the complaints were tested at Ilion without it being possible to reproduce the defect.

It is, however, theoretically possible under very remote conditions to experience this problem and the Ilion Design Meeting of July 15, 1948, recommended that an immediate investigation be made to develop an alternate design which would eliminate the hazard.

OBJECTIVE

It has been the objective of this study to prepare alternate designs of the Model 721-722 fire control and safety to eliminate any theoretical possibility of the gun firing when the safety is moved to the "off" position and to maintain in so far as practical the present desirable features of the trigger.

The only apparent method of assuring a "fool-proof" design, in view of [illegible] Patent No. 2,191,521 assigned to the Western Cartridge Company, has been the consideration of safeties which positively block the trigger.

SUMMARY AND CONCLUSIONS:

Three alternate designs have been derived from this study as follows:

Type I is an entirely new type of safety with, we believe, [illegible]

	Present Design	Proposed Type I	Proposed Type II	Proposed Type III
Expenditures to Date	----	($3,000 on all Proposed Design)		
Expenditures to Complete	----	$21,380.	$ 7,800.	$12,900
Standard Material	$30.588/100	$34.105/100	$34.038/100	$29.358/100
Standard Labor	$25.268/100	$27.262/100	$29.238/100	$25.565/100

RECOMMENDATIONS

In view of the lack of additional complaints covering the question of the Model 721 firing when moving the safe to the "off" position and the inability to duplicate the complaints received from the field, we recommend that action be considered as follows:

1. Consideration be given to maintaining the current M/721 trigger "as is".

2. If a change is to be made to eliminate any remote theoretical possibility of the gun firing when moving the safe to the "off" position, we consider type I which in our opinion is the best design. Its disadvantages lay in the high expenditure required to make the conversion.

3. Consideration of the Type III design for the lowest product cost with adequate safety.

4. Last, the consideration of the Type II design. A "hard safety" would always be prevalent in this version as well as high product cost. This design is presented primarily to give Sales an opportunity to maintain their advertising feature of the safety blocking the firing pin.

"If a change is to be made to eliminate any remote theoretical possibility of the gun firing when moving the safe to the "off" position, we consider Type I which in our opinion is the best design. Its disadvantages lay in the high expenditure required to make the conversion."

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DSF:HL
8/26/43